NEW ENGLAND FARMER.

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Farmer's and Gardener's Remembrancer.

[BY THE EDITOR.]

ADDITIONAL REMARKS ON FOOD FOR SWINE.

In our last paper (pp. 49, 50,) we went somewhat at large into the consideration of the different kinds of food for swine, and the different modes of preparing such food, without an intention of continuing or soon resuming the subject. But some further information, concerning these topics, having since occurred to us, which may lead to practical results of some utility, we proceed to place it before our readers.

An English farmer, whose observations are quoted with approbation in Monk's Agricultural Dictionary, says "from an accurate experiment made last year, I dare venture to recommend *baked potatoes* as an excellent food for hogs. The pork, produced by this food, was equal to that of barley and beans; but at present I cannot exactly ascertain the comparative experiment with regard to expense; however, I am of opinion that roasted or baked potatoes, considering the improvement of the hogs, is as cheap a food, if not cheaper than can be given them. I roast my potatoes on a kiln similar to what is used by oat-meal shellers for drying their oats. The action of the fire, by dissipating the crude juices that are contained in raw potatoes, reduces them to a state highly wholesome and nutritious. Boiling does this in part, but not so effectually. A potatoe roasted in the manner thus described partakes much of the nature of a chesnut, and perhaps is not greatly inferior to it."

The 4th Vol. of Communications to the Board of Agriculture, p. 296, contains a long essay on "Baking Potatoes" together with a drawing of an oven for that purpose, by Mr. W. Pierrepont. Mr. P. says "Potatoes cured by baking are not so apt to turn sour, or scour the cattle; are more dry, so that the animal fed with them drinks a deal more, and they become more hard when cold, so as to be flung to the stock with more convenience than when steamed." They were used chiefly, in fattening neat cattle and sheep. But pigs were likewise fattened with baked potatoes, and the pigs were well flavored, particularly the fat. The pigs had towards the latter end a few whole peas after each meal." The oven for baking the potatoes, used by Mr. Pierrepont, was of cast iron, set in a brick furnace in such a manner as to be embraced by the flame at the bottom and three of its sides. The potatoes were placed in vessels called digesters: which digesters "must not be in contact with the fire, and even when placed on cast iron must have legs so that they do not touch the cast iron. These vessels should have lids, steam tight, with valves, and the quicker the potatoes are done in reason the better."*

A writer in the Bath papers, vol. iii, p. 296, says "Potatoes should be dressed in an iron pot over a slow fire, *without any water than what the fire will gradually extract from the root itself.* By this mode they are far more dry, mellow and rich than when any other water is added to them." We should suppose that this mode of cooking potatoes would be about equivalent to baking or roasting. Indeed we do not perceive why potatoes placed in an iron pot over a tolerable brisk fire without water, should not be *baked* instead of *boiled;* but, perhaps if the top of the pot is covered so as to confine the steam rising from the potatoes, and the fire is quite moderate, they might be boiled in their own liquor. Experiments on this subject may be very easily made, and there can be no doubt but the *dryest* modes by which potatoes can be cooked, will be the best, provided the expense of cooking them is not enhanced by such modes, and we can avoid the risque of scorching or burning the potatoes.

If your object is merely profit in fatting your hogs you must take time for the process, and thus make them thoroughly fat. A farmer stating the result of some experiments in the Bath Society papers, vol. vi, p. 382, says, "I invariably found that the quantities of food consumed [by fatting hogs] increased every week, till the animal became three parts fat; after this period they ate but little; and almost all they ate turned to fat. It is, therefore, good policy to make them completely fat: and that can only be done by giving time." Very fat meat, however, is less palatable, and less wholesome for common family consumption than that which is less fat; but it will, we believe, commonly command a higher price in market, and is to be preferred for many uses.

We have alluded (p. 50) to some apparent differences of opinion amongst agricultural writers on the subject of making food *sour* for fattening swine; and expressed our apprehension that the wash might be injured by making it *too sour.* We have, since that was written, perused a communication addressed to the Hon. Richard Peters, President of the Pennsylvania Agricultural Society, written by J. P. De Gruchy, who appears to have been well acquainted both with the theory and practice of this branch of rural economy. This gentleman says "I differ with you, with respect to *sour* wash being the most grateful and alimentary to swine. In England I know such an opinion prevails; but in this climate I am certain, mine *eat most,* and *thrive best* while it is *sweet.*" To this Judge Peters replies, "My experience has uniformly been favorable to the *sour wash* both for health and economy; much less grain or meal will suffice; and its fermentation with water fixes the saccharine quality so essential to nutrition." The first or saccharine state of fermentation in grain or mealy substances, *generates* sugar, or converts the starch in the fermenting substance into sugar; but if the process of fermentation proceeds rapidly, it is probable that all the sugar will not be developed before the wash *begins* to turn acid, and therefore there will be most *sugar* (which is the substance wanted) in the wash, at the time the acetous fermentation *commences.* This period will, therefore be the proper time to use the wash for feeding hogs or other animals. This position may be illustrated by what some writers call the *panic fermentation,* or that process of nature, by which dough is fermented so as to become most suitable for making bread. The precise time when bread should be put in the oven is when it has undergone such a degree of fermentation as to correct the heaviness and insipidity of the flour, or has arrived at the first degree of acidification. And if the dough was intended to feed swine, it should be given them in that state of its fermentation when it would make the best bread. If it becomes decidedly acid it has lost a part of its nutriment, and has begun to be dissolved into its original elements. An analogous period in the fermentation of a wash should, we think, be chosen for feeding swine with it. And this period will be while it is yet full of fixed air, sweet, palatable, but slightly acid, or *beginning* to be sour.

But the question whether *sweet* or *sour* wash is most grateful to swine would be more correctly decided by pigs than by philosophers.—Place before your swine several washes in different vessels, but the messes made of the same materials, say Indian meal with mashed potatoes and water. Let wash No. 1 be perfectly fresh; No. 2 in the saccharine stage of fermentation; No. 3 slightly acid; and No. 4 completely soured, and leave it to the hogs to settle the dispute so far as respects what kind of wash is most "grateful" to the taste of those animals; and we believe the kind which they prefer will prove most "alimentary," or nourishing and wholesome, as well as most toothsome. It is said to be foolish to dispute about the tastes of human beings (*de gustibus non est disputandum*) and it is surely much greater folly to dispute about the taste of a hog, when the animal is ready to decide for himself. Perhaps, however, a change of diet, as regards sweet or sour food, may prove useful, and if hogs are found to prefer the former, yet now and then an acid mess may give an edge to their appetites; or if food a little sour is best for their general consumption, now and then a sweet mess may be given for the sake of variety.

There is a species of fermentation of grain highly recommended by some foreign agriculturists, as useful in preparing food for swine, which may perhaps in some instances be adopted by the American farmer. We allude to *malting* grain, which is often done in England, to feed pigs and poultry. We do not believe that farmers in general, (even if we should recommend it) will be at the trouble and expense of sending their grain to a maltster for the purpose above mentioned, but perhaps some persons may be induced to adopt that part of the process of malting which increases the nutriment of the grain. They may soak their pease, Indian corn, &c. till it begins to sprout, by which means saccharine matter will be developed, and either give it to their hogs while moist, dry it in a kiln, or spread it thin and expose it to the sun till perfectly dry, when it may be kept in the granary, and used when wanted.

*The volume from which this is extracted (as referred to above) may be found in the Library of the Massachusetts Agricultural Society, and may be profitably consulted by any person who contemplates feeding swine or other animals with potatoes on a large scale.

It is said that hogs thrive best when there are but three or four in the same apartment of a pen. They are fond of society, but are apt to degenerate into a "swinish multitude," and become exceedingly riotous if congregated in a large assembly. As they know no law, and acknowledge no right but the right of the strongest, they sometimes condemn a weaker brother in a popular assembly, as the Athenians did Socrates, and proceed to execute him without judge or jury. The stye, therefore, should have a number of apartments separated by close partitions, and there may be a general feeding trough, to which each division of animals may have separate access.

The experienced farmer need not be told that fatting hogs should have now and then a dose of brimstone and antimony given with their food, in order to preserve their health and increase their appetite. But there may be some who never knew, or do not remember, that *rotten wood* thrown to them occasionally will be devoured with avidity, and serve as an absorbent of acrid juices, which might otherwise occasion a disorder which, in human subjects, is called dyspepsia, or indigestion. It is likewise said that to throw them now and then a few pieces of charcoal will answer the same purpose. At any rate, those substances can do no harm, and if the swine have an appetite for them they will doubtless prove beneficial.

FOR THE NEW ENGLAND FARMER.

Mr. Editor—A writer in your paper, vol. 2, p. 6, states that he has *heard* of a cure for poison on the skin, but does not know it to be effectual. I will state to you one which I discovered by accident, and which I have practised for myself and work people, for years, when poisoned, and with the best success. It is to wash the parts affected with weak lye; if this is not at hand I have sometimes dissolved a little pearlash in cold water, and had it produce the same beneficial effects. I always make the application as soon as the poison makes its appearance. How this treatment would do in an advanced stage of the disease, I am unable to say, having never had occasion to try it.

LOVETT PETERS.

Westborough, Sept. 1, 1823.

FOR THE NEW ENGLAND FARMER.

Mr. Editor—Having, within a few years, seen stated in the public prints, several opinions respecting the salivation or slavers of horses and none of them being satisfactory to me, I will submit to you some particulars that have fallen under my observation. For some years past I have been convinced that the slavers of horses is caused by their eating a kind of grass of second growth, making its appearance in the fore part of July, much resembling oats, which come up in fall after the crop has been taken off the ground, but has rather more of a brownish cast, and retains its green very late in the fall. When chewed it causes a flow of water in the mouth more than any other vegetable that I have ever seen. If it has such an effect on man, why should it not have on horses?

There is another kind of grass that can scarcely be distinguished from it otherwise than by tasting.

It is, I think, but about 20 or 25 years since there was any such disorder among the horses in this part of the country. Mine escaped for some years after it had become common in the vicinity. The first I saw in my own horses, was in a horse that was turned into a small pasture, where one had seldom been before. In another pasture, on the same hill, about 40 rods distant, separated by a natural English mowing, there was no such effect produced. From this circumstance I was led to seek for the cause of the slavers. Some had supposed it to be Lobelia or Indian Tobacco; on examination, it appeared, that in the small pasture there was no Lobelia, in the other there was much of it; and in no instance have I been able to find a plant of Lobelia that appears to have been bitten off by cattle of any kind. This satisfied me that it was not the Lobelia.

After a few years it was the same with all my pastures that had never been ploughed, and at night when my cows were brought to the yard for milking, streams of water ran almost continually from their mouths. Some few years since, being short of English hay, but having plenty of rowen, instead of hay I had my horses fed with rowen. In a short time they had the slavers as bad as they had ever had them in the summer. Remembering where this rowen was grown, the next season, upon examination, I found there was a great quantity of the grass above described. This summer my horses were not afflicted with this disorder so early as formerly. Previous to their being affected with the disease, I could find none of this grass; since that time I have discovered some, though the quantity is small compared with former years.

From the above mentioned circumstances and facts, I am led to conclude, that the grass which I have described is the true cause of slavers in horses. I leave it for the examination of others, and to those more acquainted with diseases than I am, to prescribe a remedy.

LOVETT PETERS.

Westborough, Sept. 15, 1823.

From Letters of Agricola.

In the year 1806, I was one afternoon leaning over the grave of Burns, and reading the plain inscription on his tomb-stone erected in the church-yard of Dumfries. This town was the concluding scene of the Scottish Bard; and here terminated his follies and his crimes, the last breathings of his muse and of his life. I was indulging in one of those moods, in which pain and pleasure are so equally blended, that the mind is thrown into a sort of delightful melancholy: for while I retraced many gay and lively recollections, I was forced by present objects to check the rising emotions, and embitter them with grief. His enchanting and splendid verses were contrasted, in the eye of fancy, with the dark shades of his character; the strength and manly independence of his intellect with the silly and inconsistent waverings of his moral perceptions; the bright and promising morning of his life with the ominous and black cloud, which settled on the evening of his days. I was riveted to the spot; tears filled my eyes; my whole soul was absorbed in contemplation; it was a moment of rich enjoyment. A slow and faltering step struck my ear, and turning round I discovered an emaciated, but venerable figure approaching, in the last decrepitude of old age.

"Stranger, said he, you are paying the last tribute of respect to the memory of our poet; and I must beg pardon for this abrupt intrusion." There was such an air of good nature in the old man, heightened by the sense of his helplessness, that I addressed him frankly in reply, and showed no reluctance to engage in conversation. He sketched to me, with all the loquacity characteristic of his years, the habits, the faults, the drunken broils of the man, while at the same time he appeared an ardent admirer of the faithful coloring, the playful wit, the winning sprightliness of the writer.

"Come, said he, along with me to the hillock where Burns alternately brutified his senses, or exalted them by the varied inspirations of his lyre." I accompanied him, and we ascended together the mound of earth, on the top of which is the seat—once the favorite haunt of this immortal and extraordinary genius; and alike remarkable for witnessing his fits of intoxication, and in favored intervals, his effusions of poetic rapture. It is still shown to the curious, lies within the precincts of the town, and commands a fine prospect of the surrounding country. We seated ourselves on the grassy turf; and grown familiar by an interchange of sentiment, we conversed on the most intimate footing. From Burns we soon passed to other topics, possessing novelty or interest.

"The country, said I, in every direction around, and wherever I have travelled, is mostly arable, and highly cultivated. The red and white wheats prevail universally, and are sown seemingly by the farmers in equal quantities."

"Yes; replied the old man, there is a wonderful change in this district, since I was of your age; for I can recollect the time, when there were neither enclosures nor wheat in all this country."

"Is it possible, I answered, that all these improvements are of so recent a date, as to be within the reach of your remembrance? I should like, if you would relate to me the ancient state of the country, the condition of the tenants, and the progress of agriculture."

That I shall do with all my heart, rejoined my acquaintance, his eyes brightening as he spoke; for like myself he seemed fond of the subject.

I was born, continued he, in 1719, in Lochmaben, and am now 87 years of age. The oldest thing I recollect, is the great riot which took place, throughout the whole of this shire, in 1724, in consequence of the landed proprietors beginning to enclose their estates on purpose to stock them with black cattle. The small tenants were turned out, to make way for this improvement: and the ground was fenced by a sunk ditch and wall, called then park-dikes. Great distress was felt in the country on account of this alteration; and the tenantry rose in a mob, and with pitchforks, spades, and mattocks proceeded to level all these enclosures, from the one end of the country to the other. My father was unfortunately concerned in that disturbance; and after it was quelled by the help of two troops of dragoons brought from Edinburgh, he was banished to the American plantations for his crime. I lived afterwards, and was brought up with my uncle in Nightdale, about 20 miles hence, who rented there a small farm of about 100 acres, and assisted him in working it. The general produce of all this

country was grey oats; although the gentlemen in their croft or best land raised also a little bear or bigg, and some white oats; yet the soil was by all men believed incapable of raising wheat; and accordingly it was never tried. Our common food consisted of these grey oats parched, or burnt out of the ear and ground in a hollow stone by the hand; of milk; of *kail; of groats; with never more than one ewe killed at Martinmas for the family. The houses were generally built of mud and covered with thatch; and the cloathing was of PLAIDING—a coarse twilled stuff manufactured at home, from the black and white wool mixed together. Hats and shoes were only worn by the gentry; and even they often appeared at court with a coat of their wives' making. Potatoes were not introduced till 1725, and at first were cultivated with much care, and in small patches. They were carried to the great towns on horses backs, and retailed at an high price by pounds and ounces. It was about the year 1735, when they came into common use, and before that period, there was often great scarcity of food, sometimes bordering on famine in this fine country, which was then accounted incapable of raising bread for its scanty population. Dumfries at present contains more inhabitants than were then in the whole county: and 20 acres are now more productive than 200 in those days. Such was the low state of husbandry, that the principal supply came from Cumberland, on the other side of the Esk; and I myself have witnessed on the Wednesdays, which from time immemorial have been our market days, sad scenes of real distress occasioned by the swelling of the river, which prevented the carriers from bringing forward the meal; as the want of bridges often interrupted all communication.

I have seen, proceeded the old man with greater animation, and pointing with the staff in his hand, all that country before us covered and overgrown with †whins and broom, and not a single vestige of these hedges and stone walls which cross and intersect the whole landscape. A few sheep and black cattle picked the scanty herbage; and they were prevented from eating the growing corn, either by a herd-boy who tended them, or by a temporary fence erected every year. The common people very often collected nettles in the field, of which they made a kind of coarse soup thickened with oatmeal, and enriched, on great days, by a piece of butter as a luxury. The state of Scotland from my birth up to 1745 was miserable in the extreme; the lower classes were ill fed, ill clothed, and ill lodged; and there was no revival in their circumstances till the introduction of potatoes and lime.

Of potatoes and lime, repeated I; I can perceive some reason, why the first should improve their condition, but what connexion had the last with it?

Lime, continued my instructer, operated with much more success on the prosperity of the country than potatoes; and I look upon it as the best friend we ever saw.

Explain yourself, said I; for all this seems mysterious, and I cannot conceive, how lime could have wrought such enchantment.

To your satisfaction, then, I shall account for it; and my present views have not been altered for the last 20 years of my life. Seventy years ago, in 1738, there was no lime used for building in Dumfries, except a little made of cockle shells, burnt at Colvend, and brought on horses backs a distance of twenty two miles. All the houses were either composed of mud-walls, strengthened by upright posts and these bound and connected together by wattled twigs; or they were built of stone laid, not in mortar, but in clay or moist loam. The whole town was a collection of dirty, mean, and frail hovels, never exceeding one story; because the materials had not strength or firmness to bear more. These buildings were so perishable, and stood in need of such constant propping, that people never thought of expending time, labor, and money on the comforts of a habitation, which was to fall into ruins during the course of their lifetime. Old Provost Bell's house, which was founded in 1740, is the only one now remaining of the ancient town: and although the under story was built with clay, the two upper were laid in lime which is the cause of its long standing. Between the years of 1750 and 1760, the old mud walls gave place to those of stone laid in mortar; and from that period, there has been a visible and rapid improvement. Houses acquired permanence, descended from father to son, and the labors of one generation were enjoyed by the next. To lime, then, we owe these stately edifices, with all the comforts and conveniences they confer: and it hence contributed, in a remarkable degree, to the refinement and polish of private life.

If to this fossil, continued the old man, we are indebted for the stability of our towns, we are under greater obligations for its unprecedented effects on the powers of the earth. Wheat and clover would not thrive in the county of Dumfries, or in the Stewartry of Kirkcudbright, till lime was plentifully incorporated with the soil: and after its introduction, the farmers became rich, land advanced in value, the produce was multiplied tenfold, population increased, and these counties quickly rose to their present unexampled prosperity. In my younger days, it cost much toil to raise on my uncle's farm 2 or 2½ bolls of grey oats per acre, and after taking one or two crops, the ground lay for four or five years in natural grass, which was coarse and unpalatable to the cattle. The rent —only 2s. 6d. per acre—we found great difficulty in scraping together, and we fell on a thousand shifts to accomplish it. Now, the same farm is rented at £3 10 per acre, is kept under constant cropping, rears excellent wheat, is wholly drained and enclosed, supports a genteel family in all the comforts of life, and one year's rent of it is double the sum, which could have purchased it altogether 65 years ago.—It is lime, that has warmed and meliorated the soil, that has endowed it with productive powers, and that supports all the plenty and prosperity you have been admiring, as you travelled through the district. He paused; I looked in his face, and a glow of animation had overspread the paleness of age. His right hand was extended in an impressive posture, and his left rested on his staff. The pencil of Titian could not have done him half justice. I rose and bowed; we came down together, and I retired to my apartment in the inn, to note down the particulars of this interesting conversation.

* A species of greens used in Scotland for broth, and called Colewort. † Furze.

From the Claremont (N. H.) Spectator.

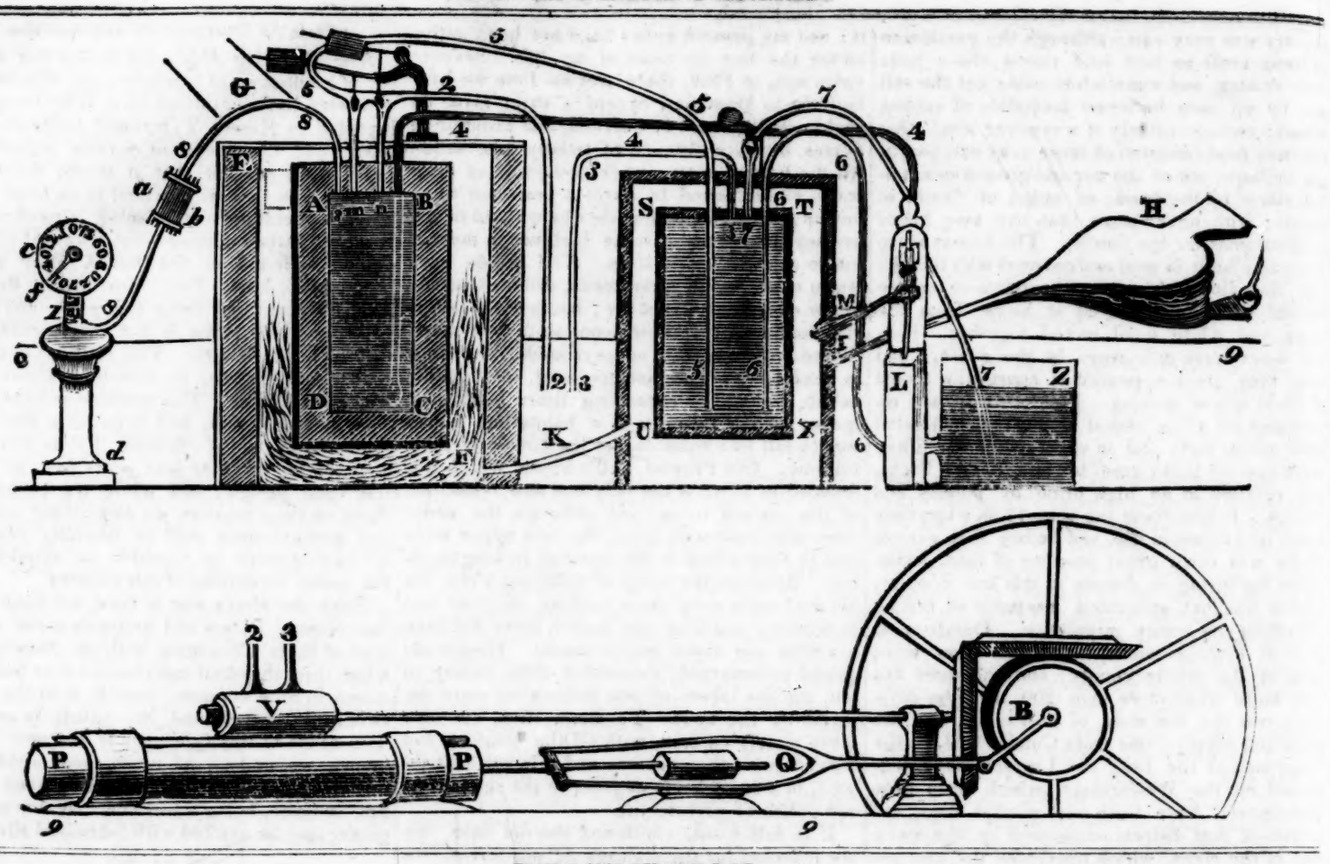
New Threshing Mill.—On Friday last a number of gentlemen of this town, and Windsor, Vt. witnessed the operations of a Threshing Mill, invented by Messrs. Tylers and Andrews of this town; and the result of several experiments satisfied all present that it would thresh and clean fifteen bushels of wheat in an hour. The labor of threshing and cleaning is performed in the most perfect manner—not a kernel of wheat could be found in the heads, after passing through the Mill. Every particle of dust and chaff is separated from the grain and blown away, and the straw is cut into pieces about four inches in length. This Mill has been used with equal success, in threshing Clover-seed, Rice, and Coffee. The machine is kept in motion by two horses, and requires a driver and four men to tend it Messrs. Tylers have been engaged for three or four years past, in perfecting their design; and while we congratulate them on their success, we hope their ingenuity and perseverance will be liberally rewarded, for having made so valuable an acquisition to the useful inventions of our country.

Since the above was in type, we have learnt that Messrs. Tylers and Andrews made another trial of their Threshing Mill, on Monday last; when they threshed and cleaned four bushels of wheat in nine minutes; which is at the rate of twenty-six bushels and two thirds in an hour, The cause of this difference in the two experiments, we understand arose from a difference in the horses; one of those employed in the first instance, being a bad one. Water or steam power may be applied with increased advantage.

From the Baltimore Republican.

The crops.—In Virginia and Maryland, the recent crops have been unusually abundant—and thanks to a beneficent Providence, the growing one promises to be peculiarly so. At Richmond on the 26th ultimo, corn, which a fortnight previous was selling at three dollars a barrel, had fallen to 1,90 a 2—meal was 75 cents a bushel, and a strong probability of its being still lower. The rains of the present month have had the happiest effect, and brightened the prospects of the planter. To the south, finer crops of corn have seldom been seen. In the two Carolinas, Georgia and Alabama, the earth is loaded with her productions.--Corn sells at 25 and 30 cents a bushel, in Georgia.—In Maryland the crops have been unusually prolific. Rye, Oats, Flax, Hay, Wheat and Corn bid fair to exceed the most sanguine expectations of the farmers in many parts of our state. While contemplating these cheering agricultural prospects, our hearts dilate with gratitude, to the "Giver of every good and perfect gift."

Mrs. G.'s Famous Bunns.—One pound and a half of flour, (a quarter pound left to sift in last) and a half pound of butter cut up fine together; then add four eggs beat to a high froth, four tea cups of milk, half a wine glass of brandy, wine, and rose water each, and one wine glass of yeast; stir it all together with a knife, and add half a pound of sugar, then sift in the quarter of a pound of flour, and when the lumps are all beaten fine, set them to rise in the pans they are to be baked in. This quantity will make four square pans full.



DESCRIPTION

OF MR. PERKINS' STEAM ENGINE, AND OF THE APPLICATION OF HIS INVENTION TO ENGINES OF THE OLD CONSTRUCTION.

From the Edinburgh Philosophical Journal.

We have already communicated to our readers in the two last numbers of this Journal, all the authentic information which we could obtain respecting Mr. PERKINS' new Steam Engine; and we have used the utmost diligence to obtain such further information as may, in some measure, gratify that curiosity which these imperfect notices have excited. There has never been in our day an invention which has created such a sensation in the scientific and in the manufacturing world. The steam engine of Mr. WATT had been so long considered as the greatest triumph of art and science, that it was deemed a sort of heresy to regard it as capable of improvement; and notwithstanding all that has been done by Mr. Woolfe, and other eminent engineers, the undoubted merit of their engines has scarcely yet been admitted by the public. Under such circumstances, Mr. Perkins' claims were likely to meet with various kinds of opposition. Instead of hailing it as an invention which was to do honor to the age in which we live, and to add a new and powerful arm to British industry, imperfect experiments and confined views were urged against the principle of its construction, the jealousies of rival traders were arrayed against it, imaginary apprehensions of danger were excited, and short-sighted politicians sounded the alarm, that such an invention would precipitate our country from its lofty pre-eminence among the manufacturing nations of the world.

Most of these grounds of opposition have been now removed by direct experiment. Mr. PERKINS' engine is actually at work. Its operations have been witnessed, and minutely examined by engineers and philosophers of all kinds; and the most unreasonable sceptics have been compelled to acknowledge the justness of its principles, as well as the energy of its operations. The active and inventive mind of Mr. Perkins, however, did not remain satisfied with this experiment. He has discovered a method, which we consider equal in value to his new engine, by which he can convey the benefit of his original principle to steam engines of the old construction; and this has been recently succeeded, we are told, by a most extraordinary discovery, that the same heat may be made to perform its part more than once, in the active operations of the engine.

In order to convey to our readers some idea of these great inventions, we have obtained a drawing, made by M. Montgolfier, Jr. which though it does not represent the actual machine, yet contains such a view of its parts as is necessary for understanding its principle.

The generator, which supplies the place of the boiler in ordinary steam engines, is a cylinder A B C D, made of gun metal, which is more tenacious, and less liable to oxidation, than any other. The metal is about three inches thick; and the vessel, containing eight gallons of water, is closed at both ends, with the exception of the five openings for tubes, shown in the figure. The generator is placed vertically in a cylindrical furnace E F, whose chimney is G, the heat being sustained by a pair of bellows H, wrought by the engine, and conveying its blast in the direction I K to F. A heat from 400 to 450 degrees of Fahrenheit is thus applied to the generator which is entirely filled with water. The valves in the tubes *m*, *n*, which are steel cylinders working in hollow steel pipes, are loaded, the one with 37, and the other with 35 atmospheres; so that none of them can rise till the heat creates a force greater than the least of these weights.

Let us now suppose, that, by means of the compressing pump L, whose handle M is wrought by the engine, water is forced into the generator; this opens the valve above *n*, loaded with 35 atmospheres, and instantly a portion of the heated and compressed water flashes out in the form of steam of high elasticity, and of a temperature of 420 deg. and communicating by the steam pipe 2, 2, 2, with the valve box V, it enters the cylinder P P, lying horizontally, and gives motion to its piston P Q which performs 200 strokes in a minute, and drives a crank R, which gives a rotatory motion to a fly-wheel, as seen in the figure.* When the eduction valve is opened, the steam, after having produced its stroke, is carried by the eduction pipe 3, 3, 3, into the condenser S T X U, where it is condensed into water at a temperature of about 320 deg. and under a pressure of five atmospheres, from thence, by the pipe 6, 6, 6, it is drawn into the pump L, whence it is forced along the

* The parallel motion represented at P Q, is not the correct one used by Mr. Perkins. The piston-rod is connected by a flexible joint, with a sort of carriage with four wheels at each end, and working in a strong horizontal box of steel.

pipe 4, 4, 4, to the generator, thus performing a complete circuit.

The forcing pump acts with a pressure exceeding 35 atmospheres; consequently, when the water received in it from the condenser is urged into the generator, it must expel a portion equal to itself in volume: this portion, as above described, flashes instantly into highly elastic steam. The forcing pump, too, is so contrived as to act with a steady force, and, consequently, the expelled water must be driven from the generator in a steady current, and thus steam of a constant elasticity is supplied to produce the power.

Some philosophers are of opinion that the heat of the portion of water which escapes is of itself sufficient to maintain the steam at that high degree of heat and elasticity with which it reaches the piston; and consequently that this engine is nothing more than a High Pressure Engine. Other persons, however, have supposed, and we confess we are among that number, that the portion of water which escapes must necessarily carry off a quantity of heat from the adjoining stratum (the temperature of which may be thus reduced below the freezing point.) But it is more likely, that, in virtue of some new law of the transmission of heat under the combined conditions of elevated temperature and high pressure, while the water, also, is forced to remain in contact with the red hot generator; the whole water in the boiler may be laid under requisition to furnish the discharged fluid with its necessary supply of caloric [heat.]

It is almost unnecessary to state, that the motion of the engine is produced by the difference in elasticity between the steam pressing on one side of the piston and that pressing on the other. In the first case, the steam recently produced, acts with a force, say of 500 pounds, on the square inch, while that on the weak side, or that communicating with the condenser, acts with only 70; the difference, or 430 pounds, being the true power gained.

When there is a surplus of water in the generator, occasioned either by working the forcing pump too violently, or by too vehement a heat, the water will escape by the tube *m* with a valve above, loaded with 37 atmospheres, and will pass by the pipe 5, 5, 5, into the condenser S T X U.

In order to explain the ingenious manner in which the pipe 4, 4, 4, supplies the generator with water, we must observe that this pipe communicates with the pump L, which is wrought by the engine.

This pump draws the water by the pipe 6, 6, 6, from the condenser S T X U, and returns it by the pipe 4, 4, 4; that is to say, when the handle M is drawn up, the water rushes into the cylinder of the forcing pump, through a valve in the pipe 6, 6, 6, opening *into* that cylinder. This valve, of course, instantly closes when the downward stroke of the pump is made, and the water now escapes through a valve opening *outwards* along 4, 4, 4; thus effectually cutting off all direct or uninterrupted communication between the generator and condenser. In order to keep the water in the condenser at a pressure of five atmospheres, the blast of the bellows H goes round the condenser S T X U; but, when it is not sufficient for this purpose, cold water is introduced from the reservoir L, by means of the pipe 7, 7, 7, loaded with five atmospheres.

From the high elasticity of the steam employed in this engine, it has been supposed to be very liable to explosion. This however is a vulgar error. Since there is no reservoir of steam exposing a large surface to its expansive force, as in the common high pressure engines, the steam being generated only in sufficient quantity to produce each succeeding stroke of the piston, the ordinary source of danger is entirely removed. But, in order to take away all apprehensions on that subject, the induction pipe 2, 2, 2, in which the steam is actually generated, is made so strong as to sustain an internal force of 4000 pounds on the square inch, which is eight times more powerful than the actual pressure, viz. 500 pounds on the square inch, with which the engine works. This enormous superabundance of strength is still further secured by means of the safety pipe, 8, 8, 8, provided with a thin copper "safety bulb," *a b*, which is made so as to burst at a pressure of 1000 pounds on the square inch. In order to satisfy his friends on this very important point, Mr. Perkins has repeatedly urged the power of the steam to such a degree as to burst the copper bulb in their presence. This tube merely rends, or is torn asunder like a piece of paper, and occasions no injury either to the spectators, or to the apparatus; so that we have no hesitation in considering this engine, notwithstanding its tremendous energies, as much more safe in its operations than even the common low pressure engine.

The safety tube, 8, 8, 8, communicates also with the indication *c d*, having a dial-plate *c e*, and an index *e f*, which by means of a suitable contrivance at *v v*, indicates the pressure or number of atmospheres with which the engine is working.

The cylinder and piston P P Q, have been separated from the rest of the engine, for the sake of distinctness. Their proper position, however, will be understood by supposing the two lines 99; 99 to coincide, as well as the tubes 2, 3; 2, 3.

This engine which we have now described, is at present performing actual work in Mr. Perkins's manufactory. It is calculated as equal to a ten horse power, though the cylinder is no more than 2 inches in diameter, and 18 inches long, with a stroke of only 12 inches. Although the space occupied by the engine is not more than 6 feet by 8, yet Mr. Perkins considers that the apparatus, (with the exception of working cylinder P P, and piston P Q) is perfectly sufficient for a thirty horse engine. When the engine performs full work, it consumes only *two* bushels of coal in one day.

On the application of Mr. Perkins' principle to Steam Engines of the old construction.

Great as the invention is which we have now described, yet we are disposed to think that the application of the principle to old steam engines is not less important. The old engines, with their boilers, are retained unaltered. The furnaces alone are removed. Mr. Perkins constructs a generator consisting of three horizontal tubes of gun metal, connected together, filled with water, and supplied with water from a forcing pump, as in his own engine. This generator is exposed to heat in an analogous manner, so that by means of a loaded valve, which opens and shuts, the red hot fluid may be constrained till forced out of the generator into the water in the boilers of Bolton & Watt. By this means, as much low pressure steam of four pounds on the square inch may be generated by *one* bushel of coals, as could be produced in the old engine by *nine* bushels. This most important result was obtained by actual experiment.

Since these great improvements have been effected, Mr. Perkins has made a discovery that seems, in its practical importance, to surpass them all. He now entirely dispenses with the use of the condenser, and works the engine against the atmosphere alone; and, by methods with which we are not acquainted, and which indeed it would not be prudent for him to disclose at present, he is enabled *to arrest the heat after it has performed its mechanical functions, and actually pump it back to the generator, to unite with a fresh portion of water, and renew its useful labors.* In an operation like this, a considerable portion of the heat must still be lost; but the wonder is that any should be saved; and we venture to say, that the most sanguine speculator on the omnipotence of the steam engine, never dared even to imagine the possibility of such an invention.

We are well aware, that, in announcing this discovery, we are exposing ourselves to the criticisms of those whose belief is naturally enough limited by their own experience; but it is satisfactory to know that Capt. Basil Hall, (whose account of Mr. Perkins' discoveries and inventions, as delivered before the Royal Society of Edinburgh, gave such universal satisfaction) has been entrusted with Mr. Perkins' discovery, and that he speaks confidently of the soundness of its principles, as well as the practicability of its application.

We cannot quit this subject without congratulating the country on the brilliant prospects with which these inventions promise to invest all our national concerns. At any period of the history of British industry, they must have existed in the highest reputation; but originating as they have done, when our commerce, our manufactures, and our agriculture, the three stars of our national prosperity, have just passed the lowest point of their orbit, and quitted, we trust, for long, the scene of their disturbing forces, we cannot but hail them with the liveliest enthusiasm, and regard them as contributing to ensure the preeminence of our industry, to augment the wealth and resources of the nation, and, by giving employment to idle hands, and direction to idle minds, to secure the integrity and permanency of our national institutions.

The London Journal of Arts, for July 1823, has been received. It contains several articles on the subject of *Perkins' Steam Engine.* It appears that our countryman had made application for three patents on the subject of his improvements and discoveries. The first passed the seal in Dec. 1822, the second was to be specified in November, and the specification of the third patent to be enrolled in December, 1823. The *Journal* adds,

"An engine (of we believe eighty horse power) upon these improved principles, is in considerable forwardness, intended for the purpose of navigation; and there is great reason to believe

that before the close of the present summer, it will be in operation beween London and Margate.

"The mode of generating steam is now fairly before the public, and from the unreserved frankness with which Mr. Perkins has received many hundreds of visiters, there can be no wish on his part to shrink from philosophical investigation; the advantages proposed are no longer a speculative hypothesis, but a subject, the merits of which can be ascertained by experiment beyond all doubt."

NEW ENGLAND FARMER.

SATURDAY, SEPTEMBER 20, 1823.

☞Subscribers who have not paid for the *first* vol. of the Farmer, are requested to forward us the amount due immediately; and those who wish to save 50 cents must pay for the *second* vol. by the 1st of October.

Extracts from a work lately published by William Cobbett, entitled "*Cottage Economy*," with occasional remarks on some of the statements of the author.

[*Continued from page* 47.]

Mr. Cobbett diverges from the main branch of his subject, in his chapter on "Brewing," to prove the superiority of *Beer*, as a beverage, to *Tea*. He says, in substance, that fifteen bushels of malt will go as far, cost much less, and supply much more nourishment than eighteen pounds of tea. He asserts that "the tea-drinking has done a great deal in bringing the British nation into the state of misery in which it now is," &c. and closes his anathema against the "wretched tea-kettle" and its abominable appurtenances, with the following appeal to an arbitrator, who would, no doubt, give the cause to Mr. C. provided he had legal jurisdiction. "It is impossible," says Mr. Cobbett, "for any one to deny the truth of this statement. Put it to the test with a *lean hog*; give him the fifteen bushels of malt, and he will repay you in ten score of bacon, or thereabouts. But give him the 730 tea messes, or rather begin to give them to him, and give him nothing else, and he is dead with hunger, and bequeaths you his skeleton at the end of about seven days." Mr. Cobbett is a sprightly as well as intelligent writer, and has a fund of humor, by which he gives an interest to subjects, which, treated in an ordinary manner, would be as dry as a Hebrew Grammar. We are therefore, in reading his works, most commonly inclined to laugh *with him*, but in this case we found it impossible not to laugh *at him*. His conclusions have nothing to do with his premises. Because fifteen bushels of malt would furnish more nourishment to a "lean hog" than eighteen pounds of tea it does not follow that tea is to be excluded from a place among those articles which minister to the *comforts* and *enjoyments*, though they might be struck out of a list of the *necessities* of mankind. Besides, Mr. Cobbett has not fairly submitted his case to his swinish umpire. The case is Beer vs. Tea, *in decoction*, and not *Malt* vs. the *Tea-plant*. If a hog would die in seven days if he had nothing to live on but "*tea messes*," we believe he could not well be fattened upon nothing but *beer*. The beer does not contain *all* the nourishment which the malt contained, for a great part of the nutritious matter goes with the brewer's grains. Moreover, the beer looses part of its nutriment by fermentation, which converts some of its sugar into alcohol. If Mr. C.'s reasoning were correct, *potatoe whiskey* would be a very *nourishing* kind of liquor, because it is made of potatoes, which contain much nourishment. The value of any substance, as an article of *human* diet, is not always in direct proportion to the nutriment which a given quantity of such substance contains. If it were so, a pint of *train oil* would be of more value for food than all the condiments of an Alderman's feast, because a Laplander would support his existence longer on train oil than upon spices, &c. But enough of this. We thought a few words might not be amiss to show that men of strong minds and undoubted talents will sometimes "miss the matter," when zealously engaged in the support of a favorite hypothesis.

We mentioned in a former number of our paper, p. 47, that we could cite the opinions of some eminent scientific characters, among our countrymen, in addition to the testimony of celebrated Europeans, in favor of tea. We now proceed to give the sentiments of Dr. Rush and Dr. Cooper; and we take it Mr. Cobbett himself will acknowledge that we have some weight of authority, if not of argument, on our side of the question.

Dr. Rush says in his lectures, "Coffee and tea excite the understanding in a most agreeeble manner. The former was the mental stimulus of Voltaire. The latter was used so constantly for the same purpose by the celebrated Dr. Johnson, that the water in his tea kettle, it is said, was seldom cold. Happily for the interests of science and literature, those two pleasant infusions have been the cordial of studious men, and thereby rescued them from the baneful effects of intoxicating liquors."

Dr. Cooper, in the American edition of Willich's Domestic Cyclopedia, observes that "much has been said and written on the medicinal properties of tea. *Good tea*, drank in moderate quantities, with sufficient milk and sugar, invigorates the system, and produces a temporary exhilaration, and clearness of ideas. But when taken too strong and copiously, it is apt to occasion slight tremor and symptoms similar in a degree to those arising from narcotic plants; but as it contains gallic acid and tannin in moderate proportions, I regard it on the whole as a most wholesome, grateful, and *economical beverage*, affording the safest and pleasantest refreshment after *great bodily fatigue*, or mental exertion; at the same time tending to support and promote that perspiration, which must otherwise be impeded."

Although we are friendly to *tea*, we are by no means hostile to *beer*, as we hope to show hereafter. But as Mr. Cobbett's authority is considered paramount on subjects of rural economy by many who are interested in the correctness of his statements, we think it highly proper to point out what appears to us to be erroneous in his writings, which, though able, are not infallible.

Mr. Perkins' Steam Engine.—We are happy to have it in our power to give our readers a drawing and description of this wonderful invention! It was well said by a writer in the Encyclopedia Brittanica, that the steam engine as it came from the hands of Mr. Watt "was the most valuable present that the arts of life have ever received from the philosopher, and the most curious object, which human ingenuity has yet offered to his contemplation. Every improvement which it has received has been the effect of philosophical study. It has now become almost as necessary to the very existence of many important manufactures, as air to animal life. The steam engine presents us a most indefatigable drudge, whose strength knows no bounds, and to the utility of whose labors no limits can be assigned." If such *was* the steam engine, what shall be said of it as it *is* in the hands of Mr. Perkins, with its powers tenfolded, and its utility increased in as great a proportion? It presents a subject above the reach of recommendation, and a simple description of the machine is its most appropriate eulogy. We are glad to perceive that our brethren, on the other side of the Atlantic, are disposed to acknowledge the source from whence they derive this "valuable present," and that the Edinburgh Philosophical Journal informs us that "the age of jealousy against America has happily gone by," and speaks of the "scientific renown of our great descendants."

From the Centinel of Wednesday.

BOTANIC GARDEN.

At a meeting of the board of visiters of the *Massachusetts Professorship of Natural History*, September 13, 1823—

The Curator of the Botanic Garden stated, that George Brown, Esq. of Beverly, had presented to the Garden, a very interesting and extensive collection of seeds, and three large boxes of living plants, obtained by him from the royal garden at Rio Janeiro—among which, were the Artocarpus, or bread fruit; the Cinnamon; the Camphor Tree, (Laurus Camphora); the Clove, the black Pepper, (piper nigrum); Crinunus, a new yam from Angola; two new varieties of Orange, from China; a seedless variety of the Orange, large and well flavored; the Lime Tree; several species of Epidendrum, and Tillandsia; together with several bulbs, not yet known. The whole of them very desirable, and most of them not before in the garden. Mr. Brown also offered to obtain for the garden, any Brazilian plants which were requested.

Voted, That the thanks of this board be given to George Brown, Esq. of Beverly, for his valuable present of a fine collection of plants, collected and purchased by him at Rio Janerio, which plants are very rare, and arrived in fine order at the Botanic Garden, at Cambridge, and that the Corresponding Secretary be pleased to express to Mr. Brown their further thanks for his offer to add to his past benefits, such plants as he may hereafter have an opportunity of procuring.

Copy from the Record.

BENJAMIN GUILD, *Secretary.*

From the N. Y. National Advocate.

Horticultural Society.—It will be seen by the following extract from minutes of the proceedings at a meeting of the New-York Horticultural Society, that Mr. Douglas, the eminent botanist, of whom we spoke a few days since as having been sent to this country by the London Horticultural Society, has returned from Philadelphia, and is prepared to commence his examinations and collections in this vicinity, aided by the counsel and assistance of a committee of the New York Society, selected from among its most scientific and efficient members.

At the monthly meeting of the New York Horticultural Society, held at the Broadway-house on Tuesday evening, Aug. 26th, letters and other communications from the London Horticultural Society were received, with offers "to establish a reciprocal communication on the science to which both societies are devoted."

The same being taken into consideration, on motion of Dr. Hosack, Resolved, That a committee of five be appointed to confer with Mr. Douglas, the representative of the Horticultural Society of London, now in this city, and afford him every aid in effecting the objects of his mission. Whereupon, the President, Vice President, Secretary, Dr. Hosack and Thomas Hogg, were appointed to compose said committee.

A committee of three was appointed to inspect some Spanish tobacco raised from Havana seed by Dr. Buxton.

Fine melons were exhibited by Mr. Wilson and Mr. Codie; a number of fine peaches and grapes by Mr. Shaw; two very large peppers of a new sort from Cuba, were presented by Mr. White, one of which measured seven inches round; a very large leaf of tobacco produced from seed obtained from the South Seas, was presented; also specimens of Cohea Scandens, a beautiful running plant from Mexico, by Mr. Codie.

Extract from the minutes.

MICHAEL FLOY, *Secretary.*

William Almy, Esq. has presented the editor of the Providence Journal with two apples, not fully grown, one of which is 12, the other 13 inches in girth.

FOREIGN.

SPAIN.—We have, within this week past, received news from Spain of all kinds and qualities, some reports calculated to invigorate hope, and others to create despondence in the friends to freedom and to Spain. The balance, however, is at present greatly against Spanish independence. The Constitutionalists fight bravely, but the mass of the population are not hearty advocates of their own cause. They seem to court their chains, and have a kind of affection for their shackles, which has been generated by habits of submission to despotic authority.

The last accounts from the seat of French and Spanish hostilities were received by the ships Topaz and America, which arrived at this port on the 15th inst. By those it appears that the Duke d'Angouleme had left Madrid, and was on his way to Seville. The siege of Corunna is continued. Gen. Quiroga, at the last dates, was in London, about to embark for Cadiz. Ballasteros has been defeated by Molitor. Gen. Wilson was at Vigo, and had opened a correspondence with Gen. Morillo, which had for its object a termination of hostilities, but terminated in nothing. The siege of Cadiz was pressed with vigor, and the place as vigorously defended. Gen. Morillo was overrunning Galicia without meeting much opposition. A new corps of French soldiers, under Gen. Lauriston, had entered Spain, with a large train of battering artillery, and had commenced the siege of St. Sebastian.

Gen. Morillo, Count of Carthagena, by a decree of the Spanish Cortes, has been declared a traitor, and deprived of his rank, title and dignities.

Spaniards Successful.—Papers received since the above was written, give a more favorable aspect to Spanish affairs. They state that in the battle between Ballasteros and Molitor both sides claimed the victory—the battle had been terrible, both parties kept the ground and the action would be renewed under circumstances highly unfavorable to the French. Ballasteros, however, had taken the French artillery. Morillo will neither recoguize the Cortes nor the regency; his army have denounced him and he has fled. Quiroga has assumed the command of the troops, who are in good spirits, 8000 strong. The garrisons of St. Sebastians and Pompeluna have made successful sorties, and obliged the French to abandon their camps. Provisions are cheap in Cadiz, the prices falling, and there is no prospect of the speedy surrender of that place. In Catalonia "there is no end to fighting, and the Spaniards always successful."

DOMESTIC.

Hartford Cattle Show.—The Cattle Show and Fair of the Hartford County Agricultural Society will take place in that city on the 8th of October.

Fruit Trees.—Mr. Denniston, of Albany, has cultivated plum-trees in his fine gardens near that city, to great perfection. He has twenty-five different kinds, which produce such an abundance beyond the supply of his family and friends, as to enable him to dispose of $600 worth in the public market in one season.

Fine Fruit.—A New York paper says, "We understand that Mr. Shaw presented to the Horticultural Society, at their last meeting, some elegant specimens of fruit, amongst which were two new species of the Peach, the Marie Antoniette, imported from France, and the Unique which originated in Mr. Shaw's ground. We had the pleasure of viewing the fruit; it is of singular beauty, and exquisite flavor, and is a desirable acquisition to our present stock."

Melon Molasses.—We are informed that molasses of a good quality has been made the present season, in South Carolina, from the juice of water melons boiled down.

Rare Sport.—On Friday last, as Mr. James Jackson, of Islip, (L. I.) who had been out with a party of gentlemen hunting Deer, was returning home, he fell in with a den of Rattle Snakes, and actually shot and bagged fourteen, which he exhibited in the evening to his brother sportsmen. How many got away, (says Mr. Jackson in his letter to us) I cannot say, as it was in a thicket of wood where there was a great deal of underbrush."—*N. Y. Evening Post.*

Extract of a letter from an officer on board the U. S. frigate Congress, dated Gibraltar, July 27, 1823.—We have been off Cadiz for the purpose of landing Mr. Nelson, our Minister to the court of Spain, but we were not permitted to pass the French squadron which is blockading the place. The King is closely pent up there, by land and sea. The French are overrunning all Spain, and meet with no manly resistance from the Spaniards. Indeed, the latter seem rather inclined to sell their country for gold, than to defend it with arms.

Thieves.—This section of the state has recently been visited by a horde of wretches, who have plundered property to a considerable amount. Four or five horses, fifteen hundred dollars in cash, and several articles of less value, have been stolen in this and the adjoining towns within a few days. It behoves every inhabitant to guard against similar depredations, and to be on the alert to detect these villains. The societies in Milton, Ballston, Galway and Greenfield, for the detection of horse theives, have proved very beneficial. Since their formation, scarcely a horse thief, who has dared to infest those towns, has escaped; and we are glad to perceive that a similar society is about being formed in this town.—*Saratoga Sentinel.*

The Belfast (Maine) paper of the 10th inst. says, The weather has been for a long time past and continues to be extremely dry. The woods all around us are on fire, and this village literally enveloped in smoke. Several alarms have been given, when buildings were supposed to be in danger, and the enginemen and other inhabitants turned out with promptness and alacrity. We have heard of no buildings being burnt in this town or its immediate vicinity.

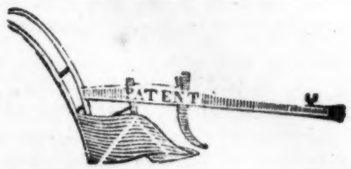
Fire in Maine.—The fire in and near Wiscasset was very distressing. One aged female was burnt to death in attemting to escape from the flames. Another saved herself by descending a well, into which she had previously thrown a chest and bed. "It was indeed," says one of the papers, "an appeal to the most obdurate heart to see the frantic mother with her affrighted children, running to and fro, through a burning forest, without a prospect of retreat or a hope of refuge. Such was this fire, which in the short space of two hours, levelled with the ground, buildings, trees and fences to the extent of seven miles in length and three in breadth. It might well be termed a flaming whirlwind, spreading dismay and despair, and leaving nothing but the last consolation of the wretched, the safety of their lives."

An end of blue cloth, 11 1-2 yards, being part of a piece manufactured by Mr. William Hirst, of Yorkshire, Eng. was sold yesterday, at auction, by Messrs. Boggs, Thompson, & Co. for $17 75 per yard. It is understood that the Emperor of Russia, the King of England, and the President of the U. States have each had a coat from the same piece.—*N. Y. paper.*

Pyrolignous acid.—The Statesman informs us, that the body of Mr. Senator Boardman, who died in Ohio, has been brought from that state in a perfect and unaltered condition, by being preserved in pyrolignous acid, a chemical preparation now in general use for preserving animal substance. We have for some time been of opinion, that pyrolignous acid far excels the Egyptian gums and spices used by the ancients for embalming the dead; and bodies thus preserved will last for ages unaltered in their features, and but slightly in complexion.—*N. Y. Advocate.*

Industry is the fountain of Independence.—We are informed by a gentleman of veracity, that there is a boy living in Newton township, in this county, who, during the last winter, spun from tow, and with five needles knit himself a pair of pantaloons with suspenders and stockings complete. The whole was done in nights by firelight, for he is obliged (though but thirteen years of age) to work in the day time for the support of his aged parents. His name is William Pickle. He has it in contemplation to construct another pair out of wool. The independence of his mind, for one of his age, is truly astonishing. On being offered a present of sufficient wool to make his intended garment, he refused, saying he could earn it himself.

Zanesville (Ohio) Messenger.



PATENT CAST STEEL HOES, &c.

RECEIVED by the Emerald from Liverpool, and for sale at the AGRICULTURAL ESTABLISHMENT, No. 20, Merchants' Row, a further supply of English Cast Steel Hoes, of a superior quality.

On hand, a large supply of

Steel spring-tempered Potatoe Hoes,
Best warranted Bush Scythes,
Patent Scythes Snaths fitted to the same,
A few very superior ivory handled Budding Knives,
Steel and Iron Bull Rings,
Copper Fumigators,

with a large and general assortment of

AGRICULTURAL & GARDENING IMPLEMENTS.

September 13.

PRICES OF COUNTRY PRODUCE, &c.

[Revised and corrected every Friday.]

		FROM D. C.	TO D. C.
ASHES, pot, 1st sort,	ton.	135 00	137 50
pearl do.		135 00	
BEANS, white,	bush	90	1 00
BEEF, mess, 200 lbs.	bbl.	9 00	9 50
cargo, No 1,		7 75	8 00
" No 2,		6 75	7 00
BUTTER, inspect. 1st qual.	lb.	11	12
" 2d qual.		9	11
small kegs, family,		12	14
CHEESE, new milk		7	9
FLAX		8	9
FLAX SEED	bush	65	70
FLOUR, Baltimore, Howard St.	bbl.	7 75	
Genessee, new,		7 50	
Rye, best		3 75	4 00
GRAIN, Rye	bush	60	63
Corn		55	60
Barley		68	70
Oats		35	00
HOGS' LARD, 1st sort	lb.	11	12
HOPS, No 1, Inspection of 1822		12	13
LIME,	cask	1 00	1 12
OIL, Linseed, American	gal.	60	65
PLAISTER PARIS	ton.	2 75	3 00
PORK, Navy Mess	bbl.	12 00	
Bone Middlings		14 50	15 00
Cargo, No 1,		12 00	
Cargo, No 2,			
SEEDS, Herd's Grass, 1822,	bush	2 00	
Clover	lb.	7	8
WOOL, Merino, full blood, washed		55	65
do do unwashed		40	50
do 3-4 washed		45	55
do 1-2 do		40	45
Native do		35	37
Pulled, Lamb's, 1st sort		55	60
do Spinning, 1st sort		45	50
PROVISION MARKET.			
BEEF, best pieces	lb.	10	12
PORK, fresh		6	10
VEAL,		4	10
MUTTON and LAMB,		3	10
POULTRY,		12	14
BUTTER, keg & tub, family,		14	16
lump, best		18	20
EGGS,	doz.	12	14
MEAL, Rye,	bush	70	75
Indian,		68	70
POTATOES, new,		37	42
CIDER, liquor, new	bbl.	1 50	2 00
HAY, best,	ton.	16 66	17 50

FEMALE FELICITY.

What happiness the rural maid attends,
In cheerful labor while each day she spends!
She gratefully receives what Heaven has sent,
And rich in competence enjoys content;
(Such happiness, and such umblemish'd fame
Ne'er glad the bosom of the courtly dame;)
She never feels the spleen's imagin'd pains,
No melancholy stagnates in her veins;
She never wastes her life in thoughtless case,
Nor on the velvet couch invites disease.
Her home-spun dress adorns her person more
Than all the gew gaws grandeur ever wore.
In reputation (which is all her boast)
She stands superior to each reigning toast,
For malice never meddles with her name,
Nor envy dares her purity defame.
No midnight masquerade her beauty wears,
No paint her waning loveliness repairs;
No home-bred jars her quiet state control,
No watchful jealousy torments her soul.
If love's soft passion in her bosom reign,
An equal passion thrills her happy swain;—
Soon Hymen joins assenting hearts and hands,
The parson twines and sanctifies the bands.
At length with joy she sees her little race
Hang on her bosom, and her cottage grace;
The fleecy ball their busy fingers cull,
Or from the spindle draw the length'ning wool;
Thus flow her hours with constant peace of mind,
Till age the latest thread of life unwind.

From the Providence Journal.

We have in fresh recollection, an incident, which led to the separation of man and wife, which in the original was the most trifling; but in the sequel was disastrous and distressing. A gentleman received one morning, when at the breakfast table, a cup of coffee from the hand of his wife, which contained the oil of a small piece of butter which had accidentally fallen into the cup. Louisa, said the husband good humoredly, I'll thank you to give me a cup of coffee that is pure and unadulterated. Henry, replied the wife, do you think it is poisoned? No, certainly not, but I should prefer having another cup. Indeed you shall, replied Louisa, but permit me to drink that which you complain of. No, madam, you shall not, replied the husband sternly, and instantly threw the contents of the cup into the bosom of Louisa. She rose hastily from the table, looked wistfully towards Henry, and wildly gazed on all around her. With lingering steps she moved from the apartment, and for the last time looked a farewell to Henry.

An uninterrupted silence ensued, but when the consternation of the persons present subsided, the distracted husband, in a paroxysm of despair, rushed into the street, and followed the footsteps of crazed Louisa. In vain he sought her in every nook and corner of the city, for she was not to be found, and the frantick husband returned hopeless and hapless to his desolated mansion, where he indulged in excessive sorrow and despair. Scarce two hours had elapsed before Mrs. A. was returned to her husband, not glowing in youth and beauty, but a lifeless corpse. The treatment she received from him she loved crazed her, and in the moment of distraction she committed suicide. Mr. A. survived the shock a few months, when he expired, and in his last moments lisped the name of Louisa, and prayed for her forgiveness.

From the Old Colony Memorial.

Various as the inclinations of men, are the occupations of life. Labor for support, was in the beginning, the appointment of Heaven. It has ever been, as it were, *a condition* of human existence. He who is *too good*, or rather *too indolent*, to make exertion, is too good, or rathea too indolent, to *live*.

But in no employment, can so much profit be combined with so much pleasure, as in that of Agriculture. Although the farmer is not distinguished with the same honors that a grateful country bestows on her warriors, be it remembered, the wreath of the victor, the price of "garments rolled in blood" is to be obtained only at the risque of life and fortune. Although he does not share with the seaman, in the charms of novelty, the delight of gazing at the wonders of distant cities, yet winds and waves and lawless men perhaps must be encountered, before these charms of novelty, these distant cities can be brought to view. The cup of the farmer is not thus mixed with doubt and uncertainty. Raised not above the common level of mankind, he is equally free from the wants that creep around the cottages of the poor, and the plagues that haunt the door of the wealthy. Not depending upon other men for his food and clothing, he possesses and can use them at his will. To labor in the season for laboring, is no more than he expects; and when the frosts and snows of winter have bound him to his cottage, he enjoys the fruit of his labors. In such enjoyment, there is more satisfaction than the splendid retinues and luxurious feasts of Emperors can afford.

"Thus in some deep retirement, would I pass
The winter glooms, with friends of pliant soul,
Or blithe, or solemn, as the theme inspired."

"Two pence for my cresses," cried a little boy in the streets of Philadelphia one day—he is now an eminent merchant and worth millions of pence—"La! pa, how mean it looks to see that little boy crying cresses for two pence," said a little gentleman whom he passed one day—that person died a poor creature in gaol. Learn this lesson. Two pence is but the beginning of shillings—shillings of fortune—fortune of ease and luxury. Look well to your two pences and fear not. But neglect them and they will neglect you—they come not like the physician in the hour of adversity, but when the sun is up and the day of health lasts.

Romantic Lover.—A romantic story is related of an Englishman, who sought the hand of a very charming lady, with whom he was passionately in love, but who constantly refused him. As he had reason to believe she loved him, he entreated to know the reason why she refused her consent to their union. The lady, subdued by his constancy, told him that her only motive for refusing him was, that having by an accident lost a leg, it had been replaced by a wooden one; and she feared that sooner or later this circumstance would chill his affection for her. This she declared to be her only motive. The lover protested that this would never make him change his love; but she persisted in refusing to marry him. Fired with love, and determined that nothing should obstruct his design, he, under the pretext of going a distant voyage, left the lady and hastened to Paris, where he had one of his own legs amputated. When he had recovered, he returned to London, went to the lady, and told her that there was now no obstacle to their union, for that he was equally mutilated with herself. The lady, conquered by such a proof of affection, at last consented to marry him.—*Athenæum.*

Double-tongued Lady.—The Brighton (English) paper mentions, that there is at present residing in Brighton, a lady of great beauty and accomplishments, possessed of a quality which puts out of all distance the fame of the celebrated Mr. Doublelungs. This extraordinary and singular faculty arises from a peculiar formation of the tongue, which is separated to the root, in a longitudinal direction, and actually forms a *double tongue*. Not the slightest inconvenience is felt from the exuberant gift of nature. With this desirable and admirable addition to the organ of *domestic comfort*, this lady is enabled to afford entertainment to her friends, beyond the power of any ventriloquist, or indeed conception. From the personal charms she possesses, as well as a highly endowed mind, she has had many suitors, some of whom have retired from paying homage, owing to the effects of the extra *clapper* hung in this enchanted *belle*. She possesses two voices: one exceedingly clear, sweet, and harmonious, allowing her to sing with great effect: the other so exquisitely thrilling, that it must have been bestowed on her for no other purpose than to lisp the still small voice of love. With this voice she imitates exactly the notes of many birds, piping like a bulfinch, singing as a canary. What is remarkable, her mother was deaf and dumb.

Suit at law.—Two suitors at court being reconciled to each other after a very tedious and expensive suit, applied to an artist to paint a device in commemoration of their returning amity and peace. The artist accordingly painted one in his shirt and the other stark naked.

I will admit that it is impossible for any man not to have some enemies. But this truth from long experience, I assert that he who has the most friends, and the fewest enemies, is the strongest; will rise the highest with the least envy; and fall, if he does fall, the gentlest, and the most pitied. This is surely an object worth pursuing. I will add one observation more, and then conclude. There is no one creature so obscure, so low, or so poor, who may not, by the strange and unaccountable changes and vicissitudes of human affairs, somehow or other, become an useful friend, or a troublesome enemy, to the greatest and the richest.—*Chesterfield.*

There are people, who, like new songs, are in vogue only for a time.

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